SWRCB Received Date: 3-30-2016

ATTACHMENT G – NOTICE OF INTENT

2016-xxxx
WATER QUALITY ORDER NO. ~~2011~~-0002-DWQ
GENERAL PERMIT NO. CAG 990004

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM VECTOR CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item ☒ A. New Applicator ☐ B. Change of Information: WDID# _____

☐ C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name Sutter-Yuba Mosquito & Vector Control District			
B. Mailing Address P.O. Box 726			
C. City Yuba City	D. County Sutter	E. State CA	F. Zip Code 95992
G. Contact Person Michael Kimball	H. Email address mksymvcd@pacbell.net	I. Title Manager	J. Phone 530-674-5456x101

III. BILLING ADDRESS (Enter Information *only* if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

IV. RECEIVING WATER INFORMATION

A. Biological and residual pesticides discharge to (check all that apply)*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
☐ Name of the conveyance system: _____

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
☒ Owner's name: See attachment A
Name of the conveyance system: see attachment A, applications may be made to some of the water conveyances shown on the map.

3. Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: see attachment A, applications may be made to some of the water conveyances shown on the map.

* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located (REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 5
(List all regions where pesticide application is proposed.)

A map showing the locations of A1-A3 in each Regional Water Board shall be included.

V. PESTICIDE APPLICATION INFORMATION

A. Target Organisms: X Vector Larvae X Adult Vector

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products

See Attachment B

C. Period of Application: Start Date January 1 End Date December 31

D. Types of Adjuvants Added by the Discharger:

VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*
☒ Yes ☐ No

If not, when will it be prepared? _____

* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

☒ Yes ☐ No

VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

☒ Yes ☐ No

* If yes, a copy of the notifications shall be attached to the NOI. See Attachment C

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☒ Yes ☐ NO ☐ NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Michael Kimball

B. Signature:  **Date:** 03/01/2016

C. Title: Manager

X. FOR STATE WATER BOARD USE ONLY

WDID:	**Date NOI Received:**	**Date NOI Processed:**
Case Handler's Initial:	**Fee Amount Received:** **$**	**Check #:**

Sutter-Yuba
Mosquito & Vector Control District

MANAGER
Michael R. Kimball

GENERAL FOREMAN
Stephen E. Abshier

ADMIN. MGR.
Cathy F. Burns

February 4, 2016

To: Public Agencies

Re: **Public Health Pesticide Application Notification**

Dear Agency:

The Sutter-Yuba Mosquito & Vector Control District may be making public health pesticide applications to waters of the U.S. under your jurisdiction for mosquito control to prevent mosquito-borne diseases, such as West Nile virus. The District will be using larvicides and adulticides listed in the National Pollutant Discharge Elimination System (NPDES) permit for biological and residual pesticides discharges to waters of the United States for vector control operations.

Attached is a list of active ingredients that the District could potentially use. Your agency could expect to see applications between January 1 and December 31 of this year. However, the majority of applications occur between May 1 and October 31. The District is required to notify all government agencies that may be affected by these applications under the requirements of the general NPDES permit. Please contact Michael Kimball at 530-674-5456 ext. 101 or Stephen Abshier at ext. 106 if you have additional questions.

Respectively,

Michael Kimball
District Manager

Post Office Box 726, 701 Bogue Road
Yuba City, California 95992
530/674-5456
Fax 530/674-5534

NPDES

2016 ACTIVE INGREDIENTS LIST

LARVAL MOSQUITO CONTROL:

Bacillus thuringiensis subsp. Israelensis (Bti)

Bacillus sphaericus (Bs)

Methoprene

Monomolecular Films

Petroleum Distillates

Spinosad

Temephos

ADULT MOSQUITO CONTROL:

Deltamethrin

Etofenprox

Lambda-Cyhalothrin

Malathion

Naled

N-octyl bicycloheptene dicarboximide (MGK-264)

Piperonyl butoxide (PBO)

Permethrin

Prallethrin

Pyrethrin

Resmethrin

Sumithrin

Attachment C

Live Oak Unified School District
2201 Pennington Road
Live Oak, CA 95953

Meridian Elementary School District
15898 Central St.
Meridian, CA 95957

Yuba City Unified School District
750 Palora Ave.
Yuba City, CA 95991

Browns Elementary School District
1248 Pacific Ave.
Rio Oso, CA 95674-9618

Wheatland Elementary School District
111 Main St.
Wheatland, CA 95692-9277

Marysville Cemetery District
525 7th St.
Marysville, CA 95901

California Dept. of Fish & Game
North Central Region
1701 Nimbus Rd.
Rancho Cordova, CA 95670

South Sutter Water District
2464 Pacific Ave.
Trowbridge, CA 95659

Gilsizer County Drainage District
701 Bogue Road
Yuba City, CA 95991

Sutter Mutual Water Company
P.O. Box 128
Robbins, CA 95676

Brittan Elementary School District
2340 Pepper Street
Sutter, CA 95982

Franklin Elementary School District
332 N. Township Rd.
Yuba City, CA 95993

Marcum-Illinois Unified School District
2452 El Centro Blvd.
East Nicolaus, CA 95659-9748

Marysville Joint Unified School District
1919 B Street
Marysville, CA 95901

Wheatland Union High School District
1010 Wheatland Rd.
Wheatland, CA 95692

Wheatland Cemetery District
P.O. Box 281
Wheatland, CA 95692

US Fish & Wildlife Service
752 County Rd. 99W
Willows, CA 95988

Reclamation District 1001
1959 Cornelius Ave.
Rio Oso, CA 95674

Levee District #1
243 Second Street
Yuba City, CA 95991

Reclamation District 1500
P.O. Box 96
Robbins, CA 95676

Nuestro Elementary School District
3934 Broadway Rd.
Live Oak, CA 95953

Winship-Robbins Elementary School District
4305 S. Meridian Rd.
Meridian, CA 95957

Pleasant Grove Joint Unified School District
3075 Howsley Road
Pleasant Grove, CA 95668-9723

Plumas Elementary School District
2743 Plumas-Arboga Rd.
Olivehurst, CA 95961-8827

Yuba Community College District
2088 North Beale Rd.
Marysville, CA 95901

Sutter Cemetery District
7200 Butte Ave.
Sutter, CA 95982

Gray Lodge Refuge
3207 Rutherford Rd.
Gridley, CA 95948-9332

Sutter Extension Water District
4525 Franklin Rd.
Yuba City, CA 95993

Natomas Central Mutual Water
2601 West Elkhorn
Rio Linda, CA 95673

Reclamation District 1000
1633 Garden Hwy.
Sacramento, CA 95833

Reclamation District 2054
P.O. Box 908
Gridley, CA 95948

Dept. of Fish & Game, Dept HQ
1416 9th St.
Sacramento, CA 95814

Sutter Bypass Butte Slough
Water User Association
3207 N. Meridian Rd.
Meridian, CA 95957

Pleasant Grove Cemetery
District
P.O. Box 664
Pleasant Grove, CA 95668

Meridian Farms Water Company
P.O. Box 308
Meridian, CA 95957

Reclamation Districts 70/1660
P.O. Box 129
Meridian, CA 95957

Butte Slough Irrigation Company
P.O. Box 129
Meridian, CA 95957

Tisdale Irrigation Company
1859 Garmire Rd.
Meridian, CA 95957

Feather River Water District
280 Wilkie Ave.
Yuba City, CA 95991

Butte Water District
735 Virginia Street
Gridley, CA 95948

Reclamation Districts 777/2056
1008 Live Oak Blvd.
Yuba City, CA 95991

Yuba County Board of
Supervisors
915 8th St., Ste. 109
Marysville, CA 95901

Yuba City Administrator
1201 Civic Center Blvd.
Yuba City, CA 95993

Live Oak Administrator
9955 Live Oak Blvd.
Live Oak, CA 95953

City of Marysville Administrator
526 C Street
Marysville, CA 95901

City of Wheatland Administrator
111 C Street
Wheatland, CA 95692

Sutter County Board of
Supervisors
1160 Civic Center Blvd.
Yuba City, CA 95993

Nicolaus Cemetery District
265 Worth Rd.
Nicolaus, CA 95659

Live Oak Cemetery District
3545 Pennington Rd.
Live oak, CA 95953

PESTICIDE APPLICATION PLAN
FOR THE
SUTTER-YUBA MOSQUITO & VECTOR CONTROL DISTRICT

The Discharger shall develop a Pesticides Application Plan (PAP) that contains the following elements:

1. **Description of ALL target areas, if different from the water body of the target area, in to which larvicides and adulticides are being planned to be applied or may be applied to control vectors. The description shall include adjacent areas, if different from the water body of the target areas;**
   The Sutter-Yuba Mosquito & Vector Control District (District) is comprised of Sutter and Yuba Counties excluding the Sutter Buttes; Butte Sink; Beale Air Force Base and the Yuba County foothills. See attachment "A" for a map of the District. The District may apply public health pesticides for the control of immature mosquitoes to any site that holds water for more than 96 hours, and may apply adulticides to any location where adult mosquito populations meet treatment thresholds.

2. **Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**
   Please see the Best Management Practices for Mosquito Control in California.

3. **Pesticide products or types expected to be used and if known, their degradation by-products, the method in which they are applied, and if applicable, the adjuvents and surfactants used;**
   The NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. from Vector Control Applications was amended to list the approved active ingredients rather than having specific products named. All pesticide label restrictions and instructions will be followed for pesticides which contain the active ingredients listed below. In addition, pesticides which fall under the "minimum risk" category may be used. The minimum risk pesticides have been exempted from FIFRA requirements. Products will be applied by truck, backpack, hand can and airplane.

Active Ingredients:

Bacillus thuringiensis subsp. Israelensis (Bti)
Bacillus sphaericus (Bs) (Lysinibacillus sphaericus)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos
Deltamethrin

Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin
Any minimum risk category pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.

4. **Description of ALL the application areas* and the target areas in the system that are being planned to applied or may be applied. Provide a map showing these areas;**
   Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to affect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by this District include:

   Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by this District include: Agricultural sources such as dairies, ditches, drains, irrigated pastures, rice fields and seepage. Urban and sub-urban sources such as: bird baths, cemetery vases, clogged rain gutters, decorative ponds and fountains, ornamental and/or Koi ponds, poorly designed or damaged landscape irrigation systems, tires, and unmaintained swimming pools and spas. Managed wetland sources such as: duck clubs, Sutter National Wildlife Refuge, state wildlife areas including Gray Lodge Wildlife Area and wetlands created for mitigation.

5. **Other control methods used (alternatives) and their limitations;**
   With any source of mosquitoes or other vectors, the District's first goal is to look for ways to eliminate the source, or if that is not possible, for ways to reduce the potential for vectors. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California. Specific methods used by the

Asterisks indicate terms that are defined in Attachment A of the NPDES Permit for Vector Control

District include stocking mosquitofish (Gambusia affinis), educating residents that mosquitoes develop in standing water and encouraging them to remove sources of standing water on their property, and working with property owners to find long-term water management strategies that meet their needs while minimizing the need for public health pesticide applications.

The District raises and over-winters mosquitofish at a 20 acre aquaculture facility in Nicolaus, California. Approximately two million mosquitofish are placed into mosquito sources each year.

The District also has a comprehensive public outreach and education program. We utilize print media with direct mailings, paid newspaper advertisements, our District website and Facebook page. Public service announcements are placed on radio, in newspapers and on billboards. Informational handouts are made available to the public at various venues. Staff makes numerous presentations to public schools, service organizations and workplaces. Personnel also work an informational booth at the Yuba Sutter Fair and numerous other public events.

The District diligently identifies mosquito sources on private and public property and develops Memorandums of Understanding (MOU) to mitigate mosquito breeding. MOUs include specific BMPs utilizing Integrated Mosquito Management (IMM).

6. **How much product is needed and how this amounts was determined;**

The need to apply product is determined by surveillance. Actual use varies annually depending on the mosquito activity. The pesticide amounts presented below were taken from the Sutter-Yuba Mosquito & Vector Control District's 2015 Pesticide Use Reports as an estimate of pesticide use in 2016. Other public health pesticides in addition to those listed below may be used as part of the District's best management practices.

WATERS OF THE US 2015 TREATMENTS

PRODUCT		AMOUNT USED		ACRES TREATED
Anvil 10+10 ULV	1021-1688-8329	1204.2	gal	250400.25
Coco Bear	8329-93	2.5	gal	0.62
Duet	1021-1795-8329	167.9	gal	26862.21
Fyfanon ULV (Malathion 96.5%)	67760-34	19	gal	1897.71
Permanone 31--66	432-1250	116.6	gal	67958.6
Permanone Ready to Use	432-12577	369	gal	39477.98
Trumpet EC	5481-481	916.4	gal	146619
Zenivex E20	2724-791	3.9	gal	1443

7. **Representative monitoring locations* and the justification for selecting these monitoring locations**

Please see the MVCAC NPDES Coalition Monitoring Plan

8. **Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts:** The District's staff reviews post BMP implementation source pesticide application data to determine efficacy and compliance of BMP treatment. Examples that have resulted in the reduction of pesticide applications is the delay in fall flooding for duck club habitat, delay in flooding for rice field stubble breakdown, beaver dam management and discing, burning and vegetation management on the Sutter National Wildlife refuge. Delays in fall habitat flooding have allowed the District to utilize single brood larvicide applications in place of higher concentrated residual larvicide applications on numerous wetlands located within the District. Discing, burning and vegetation management performed on sample fields on the Sutter National Wildlife refuge showed reductions of immature mosquitoes on vegetation removal plots as compared to heavily vegetated control plots within the refuge ponds. A post beaver dam management project evaluation on a rural creek in Yuba County showed a considerable reduction in larvicides treatments and adult mosquito emergence.

9. **Description of the BMPs to be implemented. The BMPs shall include at a minimum:** The District's BMPs are described in the Best Management Practices for Mosquito Control in California and in the California Mosquito-borne Virus Surveillance and Response Plan. Specific elements have been highlighted below under items a-f.

   a. **measures to prevent pesticide spill;**
   All pesticide applicators receive annual spill prevention and response training. District employees ensure daily that application equipment is in proper working order. Spill mitigation devices are placed in all vehicles and pesticide storage areas.

   b. **measures to ensure that only a minimum and consistent amount is used**
   Application equipment is calibrated at least annually as required by the Department of Pesticide Regulations (DPR) and the terms of a cooperative agreement with the California Department of Public Health (CDPH).

   c. **a plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects to waters of the U.S. from the pesticide application;**
   This will be included in our pesticide applicators annual pesticide application and safety training, continuing education programs, and/or regional NPDES Permit training programs.

   d. **descriptions of specific BMPs for each application mode, e.g. aerial, truck, hand, etc.;**
   The Sutter-Yuba Mosquito & Vector Control District calibrates truck-mounted and handheld larviciding equipment each year to meet application specifications. Supervisors review application records daily to ensure appropriate amounts of material are being used. Ultra-low volume (ULV) application equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. Aerial adulticide equipment is calibrated regularly and droplet size will be monitored by the District to ensure droplets meet label

requirements. Airplanes used in urban ULV applications and the primary airplane used for rural ULV application is equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended area. If a secondary airplane is used in rural ULV applications, it will be equipped with an advanced guidance system.

e. **descriptions of specific BMPs for each pesticide product used; and**
Please see the Best Management Practices for Mosquito Control in California for general pesticide application BMPs, and the current approved pesticide labels for application BMPs for specific products.

f. **Descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland).**
Please see the Best Management Practices for Mosquito Control in California.

10. **Identification of the problem. Prior to first pesticide application covered under this General Permit that will result in a discharge of biological and residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:**

    a. **If applicable, establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies;**

    The Sutter-Yuba Mosquito & Vector Control District staff only apply pesticides to sources of mosquitoes that represent imminent threats to public health or quality of life. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

    - Mosquito species present
    - Mosquito stage of development
    - Pest, nuisance, or disease potential
    - Disease activity
    - Mosquito abundance
    - Flight range
    - Proximity to populated areas
    - Size of source
    - Presence/absence of natural enemies or predators
    - Presence of sensitive/endangered species or habitats.

    b. **Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;**

Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

c. **Identify known breeding areas for source reduction, larval control program, and habitat management; and**
Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to implement long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California.

d. **Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**
This is included in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan that the Districts uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results and uses these data to guide mosquito control activities.

11. **Examination of Alternatives. Dischargers shall continue to examine alternatives to pesticide use in order to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:**
    a. **Evaluating the following management options, in which the impact to water quality, impact to non-target organisms, vector resistance, feasibility, and cost effectiveness should be considered:**
        - **No action**
        - **Prevention**
        - **Mechanical or physical methods**
        - **Cultural methods**
        - **Biological control agents**
        - **Pesticides**

    If there are no alternatives to pesticides, dischargers shall use the least amount of pesticide necessary to effectively control the target pest.

    The Sutter-Yuba Mosquito & Vector Control District's uses the principles and practices of integrated vector management (IVM) as described on pages 26 and 27 of Best Management Practices for Mosquito Control in California. As stated in item #10 above, locations where vectors may exist are assessed, and the potential for using alternatives to pesticides is determined on a case-by-case basis. Commonly considered alternatives include: 1) Eliminate artificial sources of standing water; 2) Ensure temporary sources of surface water drain within four days (96 hours) to prevent adult mosquitoes from developing; 3) Control plant growth in ponds, ditches, and shallow wetlands; 4) Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes; and 5) Use

appropriate biological control methods that are available. Additional alternatives to using pesticides for managing mosquitoes are listed on pages 4-19 of the Best Management Practices for Mosquito Control in California.

Implementing preferred alternatives depends a variety of factors including availability of agency resources, cooperation with stakeholders, coordination with other regulatory agencies, and the efficacy of the alternative. If a pesticide-free alternative does not sufficiently reduce the risk to public health, pesticides are considered, beginning with the least amount necessary to effectively control the target vector.

b. **Applying pesticides only when vectors are present at a level that will constitute a nuisance.**

c. The Sutter-Yuba Mosquito & Vector Control District follows an existing integrated vector management (IVM) program which includes practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §2002(j). This definition allows vector control agencies to address situations where even a low level of vectors may pose a substantial threat to public health. In practice, the definition of a "nuisance" is generally only part of a decision to apply pesticides to areas covered under this permit. As summarized in the California Mosquito-borne Virus Surveillance and Response Plan, the overall risk to the public when vectors and/or vector-borne disease are present is used to select an available and appropriate material, rate, and application method to address that risk in the context of our IVM program.

The District does have established treatment thresholds for the Sutter National Wildlife Refuge. These thresholds are included in attachment "B".

12. Correct Use of Pesticides

Coalition's or Discharger's use of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the right spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

This is an existing practice of the Sutter-Yuba Mosquito & Vector Control District, and is required to comply with the Department of Pesticide Regulation's (DPR) requirements and the terms of our California Department of Public Health (CDPH) Cooperative Agreement. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

13. If applicable, specify a website where public notices, required in Section VIII.B, may be found.

The District's website can be found at: www.sutter-yubamvcd.org.

References:

Best Management Practices for Mosquito Control in California. 2012. Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.westnile.ca.gov/resources.php under the heading Mosquito Control and Repellent Information. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Sutter-Yuba Mosquito & Vector Control District at (530) 674-5456.

California Mosquito-borne Virus Surveillance and Response Plan. 2015. [Note: this document is updated annually by CDPH]. . Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.westnile.ca.gov/resources.php under the heading Response Plans and Guidelines. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Sutter-Yuba Mosquito & Vector Control District at (530) 674-5456.

MVCAC NPDES Coalition Monitoring Plan.

ATTACHMENT "A"

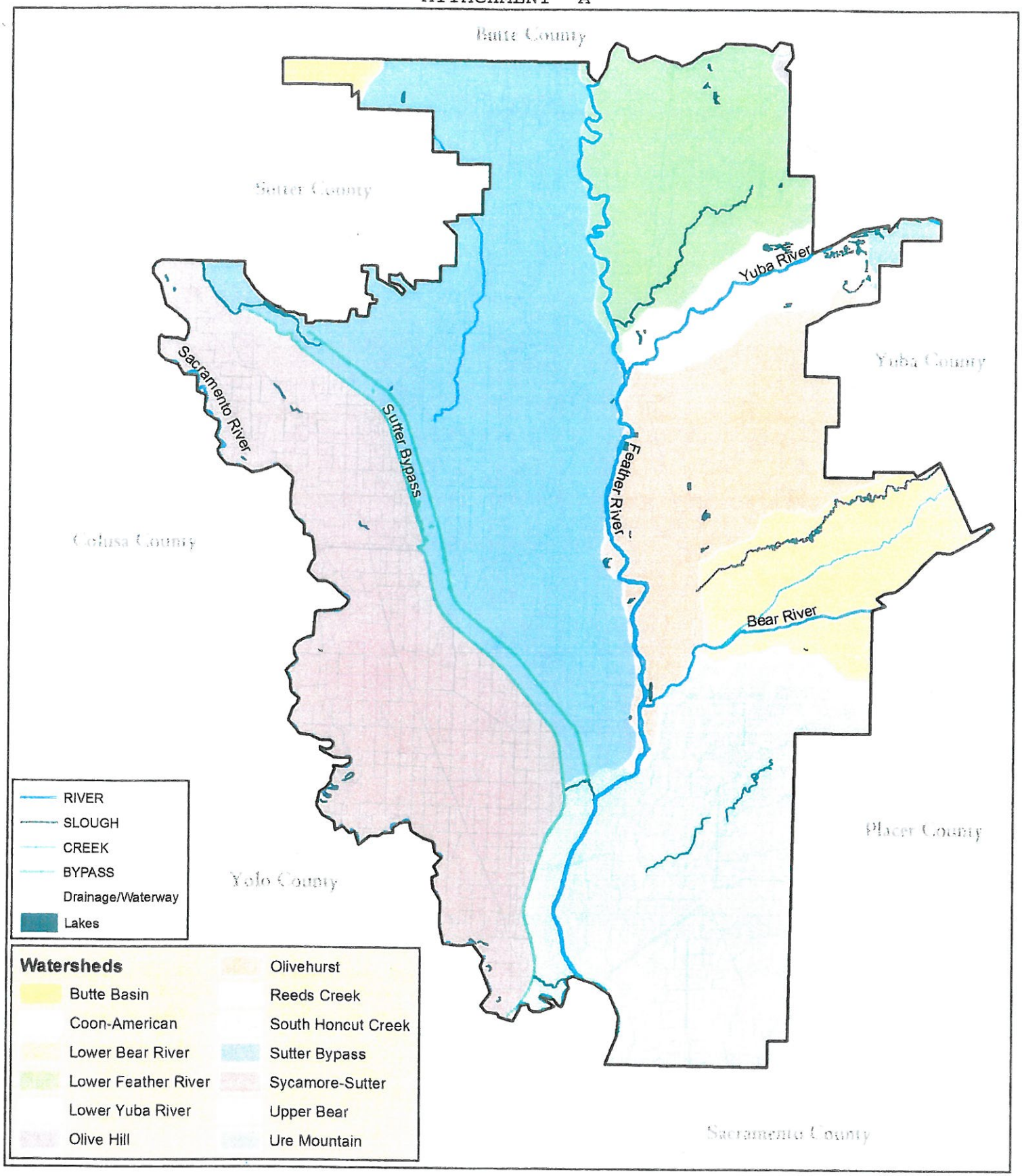

Table 12. Action thresholds for larvicide, pupacide, and adulticide applications on Refuges within the Complex.

		Treatment Thresholds[1]			
		Larvicide	Pupacide[2]	Adulticide	
Refuge	Distance From Nearest Urban Area	Dipper[3]	Dipper	*Aedes* sp. Landing Count[4]	NJLT Index for *C. tarsalis*[5]
Sacramento	6 miles south of Willows	nt[6]	nt	nt	60[7]
Delevan	4 miles east of Maxwell	nt	nt	nt	40[7]
Colusa	1 mile west of Colusa	2/2	10/10	5	5/20
Sutter	3 miles south of Sutter	2/2	10/10	10	5/20
Butte Sink	3.5 miles northeast of Colusa	2/2	10/10	10	no trap present
Llano Seco Unit	1.5 miles southwest of Dayton	2/2	10/10	5	5/20

[1]First number is during a documented public health threat; second number is outside of a documented public health threat.
[2]Refers specifically to GB-1111; used under rare circumstances where pupae have accumulated in abundance in discrete areas (i.e. windrows); would be conducted in consultation with Refuge staff to avoid areas with significant numbers of young duck broods (Miles et al. 2002).
[3] Average number per dip.
[4] Average number landing per pant leg per minute.
[5] Per trap night, based on weekly index of adult females.
[6] No threshold established; not applicable at this time.
[7] Only during an existing human health threat or emergency.

*This table is subject to change based on current condtions or changes in USFWS national policy.